

Application no. 10/072,220  
Amendment dated: August 14, 2003  
Reply to office action dated: April 15, 2003

### Amendments to Claims

Please amend claims 1, 3-5, 7, 8, 15, 17, 21-24, 33-38, and 42-44 as shown below.

Please cancel claims 14, 18, 19, 39 and 40.

Please add new claim 45 as shown below.

### Listing of Claims

This listing of claims will replace all prior versions and listings of claims in the application:

B 1. (Currently Amended) A method for managing an advertising flight in an ~~online~~ marketplace among one or <sup>more</sup> advertisers and one or more searchers, the method comprising:

maintaining a computer network-accessible database of advertiser search listings,

each search listing including a bid amount, a search term and a network location identifier of an advertiser associated with the search listing,  
the bid amount corresponding to economic value given by the associated advertiser to an operator of the ~~online~~ marketplace when network locations of the associated advertiser are referred to a searcher in response to a database query from the searcher,

search results produced from the database in response to the database query being displayable to the searcher in a rank according to the bid amounts of the search listings of the search results;

receiving advertising flight parameters from an advertiser;

from time to time, reviewing bid amounts for specified advertiser search terms

☐ listings in the pay-for-placement <sup>pay-for-placement</sup> online marketplace; and

adjusting bid amounts of the specified advertiser search terms listings to achieve specified advertiser goals of the advertising flight parameters.

2. (Original) The method of claim 1 wherein receiving advertising flight parameters comprises:

- receiving one or more advertiser search terms;
- receiving a flight budget; and
- receiving a flight interval.

3. (Currently amended) The method of claim 2 ~~further comprising wherein~~  
receiving advertising flight parameters comprises:

receiving one or more of

- a maximum average cost per click over the received one or more advertiser search terms,
- a conversion rate for the advertiser; and
- an average profit per action for the advertiser.

4. (Currently amended) The method of claim 1 wherein adjusting bid amounts of the specified advertiser search terms listings to achieve specified advertiser goals comprises:

maximizing searcher contacts with a web site of the advertiser.

5. (Currently amended) The method of claim 1 wherein adjusting bid amounts of the specified advertiser search terms listings to achieve specified advertiser goals comprises:

maximizing searcher clicks to web sites of the advertiser.

6. (Original) The method of claim 5 wherein adjusting bid amounts comprises maximizing searcher clicks to web sites of the advertiser subject to a maximum cost per click.

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7. (Currently amended) The method of claim 1 wherein adjusting bid amounts comprises:

varying bid amounts to maximize advertiser profit.

8. (Currently amended) The method of claim 7 further comprising wherein adjusting bid amounts comprises:

varying bid amounts subject to a maximum cost per click.

9. (Original) The method of claim 7 further comprising:

determining advertiser profit based on multiple searcher clicks to one or more web sites of the advertiser.

10. (Original) The method of claim 7 further comprising:

determining advertiser profit based on conversion rate.

11. (Original) The method of claim 10 further comprising:

determining search term conversion rates for a plurality of search terms having independent conversion rates.

12. (Original) The method of claim 10 further comprising:

determining search term conversion rates for a plurality of search terms at two or more ranks, search terms at each rank having independent conversion rates.

13. (Original) The method of claim 1 wherein reviewing bid amounts comprises:

reviewing all bidding combinations for one or more search terms.

14. (Cancelled)

15. (Currently amended) The method of claim 14 wherein search listings of the online marketplace each have an associated rank, and wherein reviewing bid amounts comprises further comprising:

determining ranks of advertiser search listings in the online marketplace which are not likely to achieve the specified advertiser goals be in an optimal solution; and

ignoring the search listings associated with the determined ranks when adjusting the bid amounts.

16. (Original) The method of claim 15 further comprising:

ignoring ranks below a threshold rank.

17. (Currently amended) The method of claim 15 wherein search listings of the online marketplace each have an associated rank and an associated number of clicks, the method further comprising:

ignoring ranks associated with search listings having fewer clicks than a click threshold.

18. (Cancelled)

19. (Cancelled)

20. (Original) The method of claim 1 further comprising periodically recomputing bid amounts in accordance with the flight parameters.

21. (Currently amended) The method of claim 1 wherein search listings of the online marketplace each have an associated bid amount, the method further comprising:

receiving an advertiser specified maximum bid amount for one or more search

terms listings; and

adjusting the associated bid amount for the one or more search terms listings in accordance with the maximum bid amount.

22. (Original) The method of claim 21 wherein adjusting the bid amount comprises further comprising:

reducing a determined an associated bid amount for a search listing to a level that just exceeds a next-lowest bid amount for the search listing.

23. (Currently amended) The method of claim 1 further comprising:  
receiving search queries from searchers;  
searching in a the database for search terms having a match with the search queries, ~~the database storing search terms and associated bid amounts of the one or more advertisers;~~  
providing search results from the search terms having a match with the search query;  
when a provided search term is clicked by a searcher, transferring economic value from the advertiser associated with the provided search term.

24. (Currently Amended) A database search system comprising:  
a database of search listings, each search listing including a search term ~~terms, each search term associated with a bid amount payable by an advertiser of a plurality of advertisers~~ when the search listing including the search term is referred to a searcher in response to a database query from the searcher, the search listing being displayable with other search listings in a rank according to the associated bid amounts of the search listing and the other search listings;  
a search engine responsive to search queries received over a computer network from searchers for searching the database; and

a flight management agent responsive to advertiser-specified parameters for adjusting bid amounts of search listings to manage expenditures over a time interval.

25. (Original) The database search system of claim 24 wherein the flight management agent is configured to receive information about one or more search terms of an advertiser, a budget, and the time interval.

*a1*  
26. (Original) The database search system of claim 25 wherein the flight management agent is configured to receive information about one or more of a maximum average cost per click for the one or more search terms, a conversion rate and an average profit per action.

27. (Original) The database search system of claim 25 wherein the flight management agent is configured to spend the budget over the time interval.

28. (Original) The database search system of claim 25 wherein the flight management agent is configured to maximize number of clicks to a web site of an advertiser.

29. (Original) The database search system of claim 25 wherein the flight management agent is configured to maximize advertiser profit for an advertiser over the time interval.

30. (Original) The database search system of claim 29 wherein the flight management agent is configured to maximize the advertiser profit subject to a maximum price per click.

31. (Original) The database search system of claim 29 wherein the flight management agent is configured to maximize the advertiser profit by determining profit based on multiple searcher actions at a web site of the advertiser.

32. (Original) The database search system of claim 29 wherein the flight management agent is configured to maximize advertiser profit by determining profit based on a plurality of search terms having a plurality of conversion rates.

33. (Currently amended) The database search system of claim 29 wherein search terms in the database are each associated with a respective advertiser of the plurality of advertisers, each search term have an associated rank and wherein the flight management agent is configured to determine advertiser profit for the respective advertiser based on a plurality of search terms associated with the respective advertiser, the plurality of search terms having different conversion rates at different associated ranks.

34. (Currently amended) The database search system of claim 25 wherein the flight management agent is configured to analyze all possible combinations of bids for the one or more search terms and select a combination that provides highest maximum profit to the advertiser.

35. (Currently amended) The database search system of claim 25 wherein the flight management agent is configured to analyze only likely combinations of bids for the one or more search terms and select a combination from the likely combinations that provides highest maximum profit to the advertiser.

36. (Currently amended) The database search system of claim 35 wherein the flight management agent is configured to determine search term ranks not likely to provide the maximum profit to the advertiser be in an optimal solution.

37. (Original) The database search system of claim 36 wherein search terms of the database each have an associated rank stored in the database and wherein the flight management agent is configured to exclude from further analysis search terms having a an associated rank less than a rank threshold.

38. (Currently amended) The database search system of claim 36 wherein search listings of the database each have an associated number of clicks stored in the database, a click corresponding to a referral of the search listing to a searcher in response to a database query, and wherein the flight management agent is configured to exclude search terms having received a number of clicks fewer than a click threshold.

39. (Cancelled)

40. (Cancelled)

39 41. (Original) The database search system of claim 24 wherein the flight management agent is configured to recompute the bid amounts of the search listings from time to time.

42. (Currently amended) An article comprising:

a computer readable data storage medium; and

Computer computer program code recorded on the computer readable data

storage medium for managing an advertising flight of an advertiser with an online marketplace system, the online marketplace system including a database of search listings associated with respective advertisers, each search listing including a search term, each search term associated with a bid amount payable by an advertiser of a plurality of advertisers when the search listing including the search term is referred to a searcher in response to a database query from the searcher, the search listing being displayable with other search listings in a rank according to the associated

bid amounts of the search listing and the other search listings, the computer program code operative to access search listings of the advertiser to vary the bid amounts for specified search terms in accordance with advertiser goals for the advertising flight,

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43. (Currently amended) The article computer program code of claim 42 further comprising wherein the computer program code comprises code which from time to time checks conditions in the <sup>Part-for-Placement marketplace</sup> ~~online marketplace system~~ and adjusts bids of advertiser search listings to ensure that advertiser-specified objectives are met.

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44. (Original) The article computer program code of claim 42 further comprising wherein the computer program code comprises code to update bid amounts of the advertiser according to advertiser-specified flight management criteria, the bid amounts being associated with advertiser search terms of a database searchable by searchers, the bid amounts representing economic value payable by the advertiser when a searcher selects a search term of the advertiser.

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45. (New) The database search system of claim 24 wherein the search engine is responsive to search queries received from searchers over the Internet.